

CLAIMS:

1.           A paper money receiving and paying apparatus characterized by a stacking and separating device for stacking and separating paper moneys, a paper money size detecting means for detecting sizes of paper moneys stacked in the stacking and separating device, and a travel regulating means for regulating a travel of a paper money in the stacking and separating device, and a control part for controlling the travel regulating means in accordance with a size of a paper money.
2.           A paper money receiving and paying apparatus as set forth in claim 1, characterized in that the travel regulating means causes a leading end of a paper money to impinge thereupon, and a position of the travel regulating means is changed in accordance with a size of the paper money.
3.           A paper money receiving and paying apparatus as set forth in claim 1, characterized in that the travel regulating means is adapted to rotate so as to change the position where the leading end of a paper money impinges thereupon.
4.           A paper money receiving and paying apparatus as set forth in claim 1, characterized in that an external shape of the travel regulating means is arcuated in a part thereof, or in its entirety.
5.           A paper money receiving and paying apparatus as set forth in claim 1, further characterized by an

interference preventing means for preventing paper moneys after accumulation thereof from entering into a space for accumulating paper moneys.

6. A paper money receiving and paying apparatus as set forth in claim 5, characterized in that the stacking and separating device includes a storage space where accumulated paper moneys are stored, and the interference preventing means is an inclined floor surface in the storage space.

7. A paper money receiving and paying apparatus as set forth in claim 5, characterized in that the stacking and separating device comprises a push-plate for retaining stacked paper moneys, and the interference preventing means is the push-plate which defines an inclined surface upon stacked of paper moneys.

8. A paper money receiving and paying apparatus as set forth in claim 5, wherein the travel regulating means and the interference preventing means are integrally incorporated with each other.

9. A paper money receiving and paying apparatus as set forth in claim 1 or 5, characterized in that the travel regulating means and the interference preventing means can be retracted so as to prevent interference with stacked paper moneys.

10. A paper money receiving and paying apparatus as set forth in claim 1 or 5, characterized in that a friction reducing member is incorporated in either or

both of the travel regulating means and the interference preventing means.

11. A paper money receiving and paying apparatus as set forth in claim 1 or 5, characterized in that there are provided either or both of the travel regulating means and the interference preventing means in a plural number.

12. A paper money receiving and paying apparatus as set forth in claim 1, characterized in that the travel regulating means includes a paper money entrance preventing means for preventing stacked paper moneys from being caught.

13. A paper money receiving and paying apparatus as set forth in claim 1, characterized in that the stacking and separating device incorporates a separating and accumulating guide for guiding stacked paper money which has been introduced, and the separating and stacking guide has an end part which is curved.

14. A paper money receiving and paying apparatus as set forth in claim 1, characterized in that the paper money size detecting means comprises a paper money determining part for determining a denomination of a paper money, and a memory part incorporating a data base in which denominations and sizes of paper moneys are assigned to each other.

15. A paper money receiving and paying apparatus as set forth in claim 1, further characterized by a

paper money detecting means for detecting a paper money conveyed to the stacking and separating means, and the travel regulating means is controlled through the detection of a paper money by the paper money detecting means.

16. A paper money receiving and paying apparatus as set forth in claim 1, further characterized by a stacking space volume detecting means for detecting an occupying value of stacked paper moneys which occupy a space for stacking paper moneys within the stacking and separating device, and the travel regulating means is controlled in accordance with a result of detection by the stacking space volume detecting means.

17. A paper money receiving and paying apparatus as set forth in claim 1, characterized in that the stacking and separating device stacks paper moneys in a standing posture.

18. A paper money receiving and paying apparatus as set forth in any one of claims 1 to 17, further characterized by a receiving and paying port for carrying out either or both of separation of paper moneys introduced by a user and stacking of paper moneys to be paid to a user, a paper money determining means for determining a denomination of a paper money, a temporary storage bin for temporarily storing paper moneys, either or both of a receiving bin for storing therein paper moneys which are inappropriate for payment and a return bin for respectively storing

therein and discharging different denominations of paper moneys therefrom, and a conveying path connecting the paper money determining part, the temporary storage bin and the bins to one another, for conveying paper moneys, and characterized in that the stacking and separating device is the temporary storage bin.

19.           A paper money receiving and paying apparatus as set forth in any one of claims 1 to 17, further characterized by a receiving and paying port for carrying out either or both of separation of paper moneys introduced by a user and stacking of paper moneys to be paid to a user, a paper money determining means for determining a denomination of a paper money, a temporary storage bin for temporarily storing paper moneys, return bins for respectively storing therein and discharging therefrom different denominations of paper moneys, a loading and recovering bin for charging paper moneys to and from the return bins, and a conveying path connecting the paper money determining means, the temporary storage bin and the bins to one another, for conveying paper moneys, and characterized in that the stacking and separating device is either or both of the temporary storage bin and the loading and recovering and discharging bin.

20.           An automatic teller machine comprising a paper money receiving and paying apparatus as stated in any one of claims 1 to 19.